AMENDMENTS TO THE CLAIMS:

Claims 1-6 (Cancelled)

7. (Previously presented) A gas turbine unit comprising a first compressor to compress and discharge gas, a combustor to which gas compressed by the first compressor is fed, and a turbine to be driven by combustion gas from the combustor;

wherein said gas turbine unit has a turbine-cooling system to feed gas from said first compressor to the turbine, said turbine-cooling system comprising: a heat exchanger to cool the gas compressed by said first compressor, a liquid-separating means for separating liquid from the gas cooled by the heat exchanger, a dust-collecting means for separating dust from the gas having passed through the liquid-separating means, and a second compressor to raise the pressure of the gas having passed through the dust-collecting means to a desired level.

8. (Previously presented) A gas turbine unit comprising a first compressor to compress and discharge gas, a combustor to which gas compressed by the first compressor is fed, and a turbine to be driven by combustion gas from the combustor;

wherein said gas turbine unit has a turbine-cooling system to feed gas from said first compressor to the turbine, said turbine-cooling system comprising: a heat exchanger to cool the gas compressed by said first compressor, a liquid-separating means for separating liquid from the gas cooled by said heat exchanger, a second compressor to raise the pressure of the gas having passed through said liquid-separating means to a desired level, and a dust-collecting means for separating dust from gas disposed below said second compressor.

9. (Previously presented) A gas turbine unit comprising a first compressor to compress and discharge gas, a combustor to which gas compressed by the first compressor is fed ~~to~~, and a turbine to be driven by combustion gas from the combustor;

wherein said gas turbine unit has a turbine-cooling system to feed gas from said first compressor to the turbine, said turbine-cooling system comprising: a heat exchanger to cool the gas compressed by said first compressor, a liquid-separating means for separating liquid from the gas cooled by the heat exchanger, a first dust-collecting means for separating dust from the gas having passed through the liquid-separating means, a second compressor for raising the pressure of the gas having passed through the first dust-collecting means to a desired level, and a second dust-collecting means for separating dust from the gas whose pressure has been raised by the second compressor.

10. (Previously presented) A gas turbine unit comprising a first compressor to compress and discharge gas, a combustor to which gas compressed by the first compressor is fed ~~to~~, and a turbine to be driven by the combustion gas from the combustor;

wherein said gas turbine unit has a turbine-cooling system to feed gas from said first compressor to the turbine to cool the turbine and to feed gas from the turbine to the combustor, said turbine-cooling system comprising an indirect cooling heat exchanger to cool the gas compressed by said first compressor, a mist separator for separating liquid from the gas cooled by the heat exchanger, a cyclone for separating dust from the gas having passed through the mist separator, a second compressor to raise the pressure of the gas having passed through the cyclone to a desired level and a filter for separating dust from the gas whose pressure has been raised by the second compressor.

Claims 11-19 (Cancelled)

20. (Previously presented) A gas turbine unit comprising a first compressor to compress and discharge gas, a combustor to which the gas compressed by the first compressor is fed, and a turbine to be driven by combustion gas from the combustor;

wherein said gas turbine unit has a turbine-cooling system to feed gas from said first compressor to the turbine, said turbine-cooling system comprising a heat exchanger to cool the gas compressed by said first compressor, a separating means for separating liquid and dust from the gas cooled by the heat exchanger, a second compressor to raise the pressure of the gas having passed through said separating means to a desired level, and a dust-collecting means for separating dust from the gas whose pressure has been raised by the second compressor.

Claims 21-25 (Cancelled)

26. (Previously presented) A gas-turbine cooling method for a gas turbine unit comprising a compressor to compress and discharge gas, a combustor to which gas compressed by the compressor is fed, and a turbine to be driven by combustion gas from the combustor;

wherein the gas compressed by said compressor is cooled, liquid is' separated from the gas cooled, dust is separated from the separated gas, the pressure of the separated gas is raised to a desired level, and after dust is separated from the gas whose pressure has been raised, the gas is fed to the turbine so that the turbine may be cooled.

Claims 27-32 (Cancelled)